MEMORANDUM

DATE:	October 24th, 2016
FROM:	Eric Lancaster
SUBJECT:	Weekly Progress Report @ Gold King
TO:	Kerry Guy

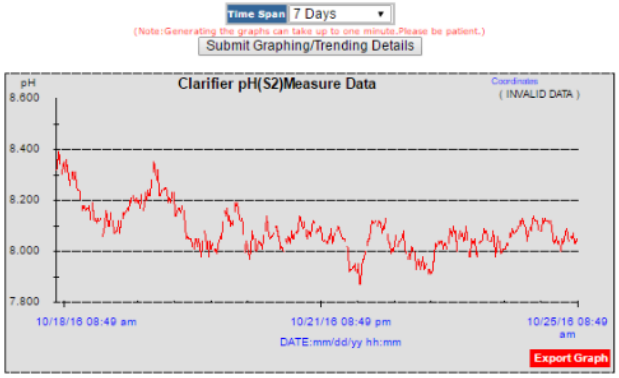
Project: Gold King Interim Water Treatment Plant (IWTP)
Location: Gladstone, Colorado
Prepared for: Emergency Response Unit – US EPA Region 8

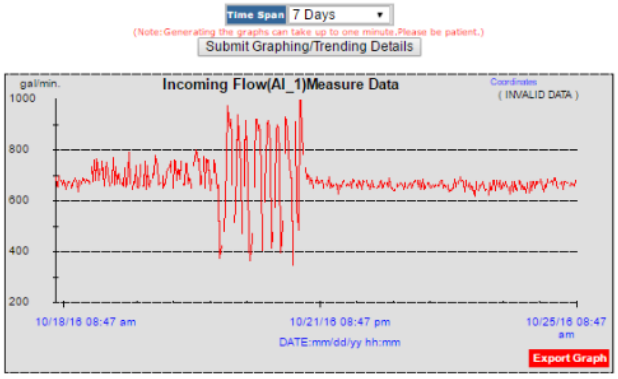
Reporting Period: Oct 17 – Oct 24
Report No.: 41

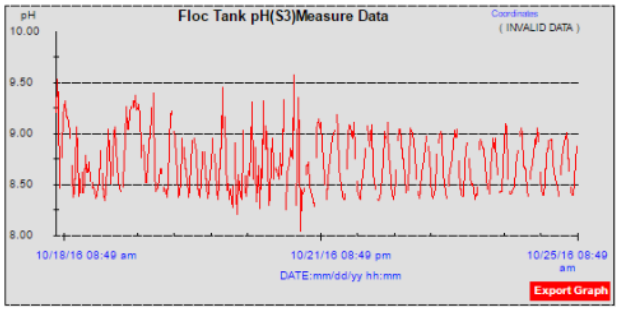
I. General Operations Summary:

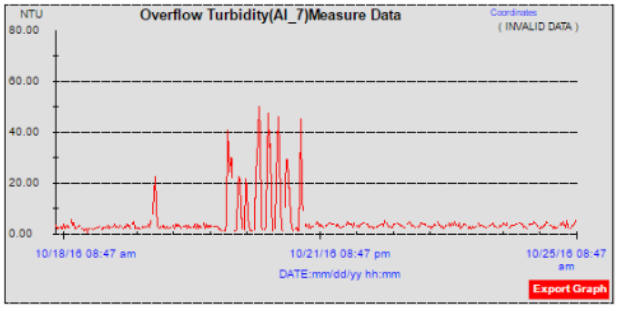
IWTS Function/Upsets

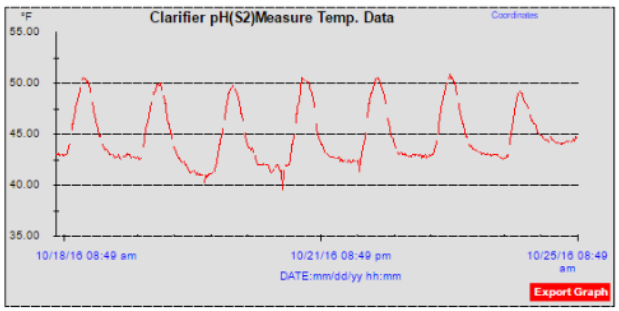
- The following graphs provide trending information during the previous 7 days. The dataloggers collect control information from the Lime Circuit (left) and Flow Circuit (right) Programmable Logic Controllers (PLCs) at the Gold King IWTP. Over the reporting period (10/17 – 10/24/2016 inclusive) Alexco treated 6.69 million gallons at an average flow rate of 664 gpm.

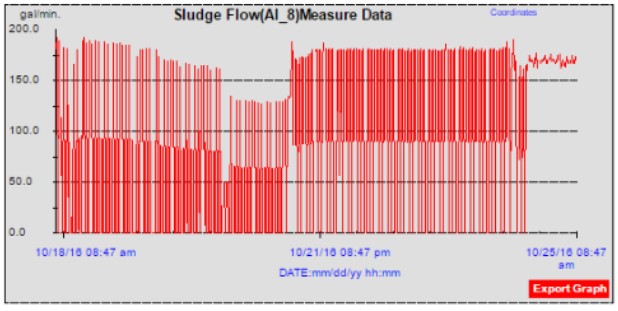












- Between 10/20 – 10/21, the IWTP experienced surging of the incoming flow rate and turbidity from Pond 2 which is believed to be caused by a swell and trapped air in the incoming 8" HDPE pipelines. The issue was reduced by throttling the Reactor Tank's incoming valve (see Photo 2), and eventually by operating both 8" incoming lines in parallel. Since that correction was made, the incoming flow rate and Pond 2 level have remained consistent.

- A pH sample from the IWTP inlet on 10/20 measured 3.82.

Communication System Function Status

- No issues – reliable operations during the reporting period.

Facility or System Related Work, including Repairs & Completions

- Alexco/Summit Mechanical installed a 3" HDPE/rubber hose pipeline from the clarifier's underflow to the sludge cells. This sludge pipeline will convey sludge to each cell for injection into the dewatering bags.
- Alexco/Summit Mechanical installed a 3" HDPE/rubber hose line from each sump to the Reactor Tank. This Pump-back pipeline will be used to recapture/treat water from the dewatering bags during higher turbidity events.
- ER buried two steel culverts to convey storm water and pipelines between the IWTP and the lined sludge area.
- Lange Containment relined Cell B.
- Alexco/ER installed and plumbed the B bag within the B Cell.
- The 30' x 10' Mobile Mini office trailer was relocated to allow for easier access near the Phase II clarifier. This is required for the upcoming building construction.
- The two communication satellites were temporarily relocated from the Mobile Mini roof to the ground near the generator. They will eventually be mounted to the IWTP building addition.
- The two 8" HDPE pipelines from Pond 2 were jetted by Badger on 10/20 to ensure limited sludge build-up within the pipes.

II. Identified Problems, Causes, and Solutions (Planned or Implemented)

- N/A

III. System Inspections – Specific elements inspected and finding

- N/A

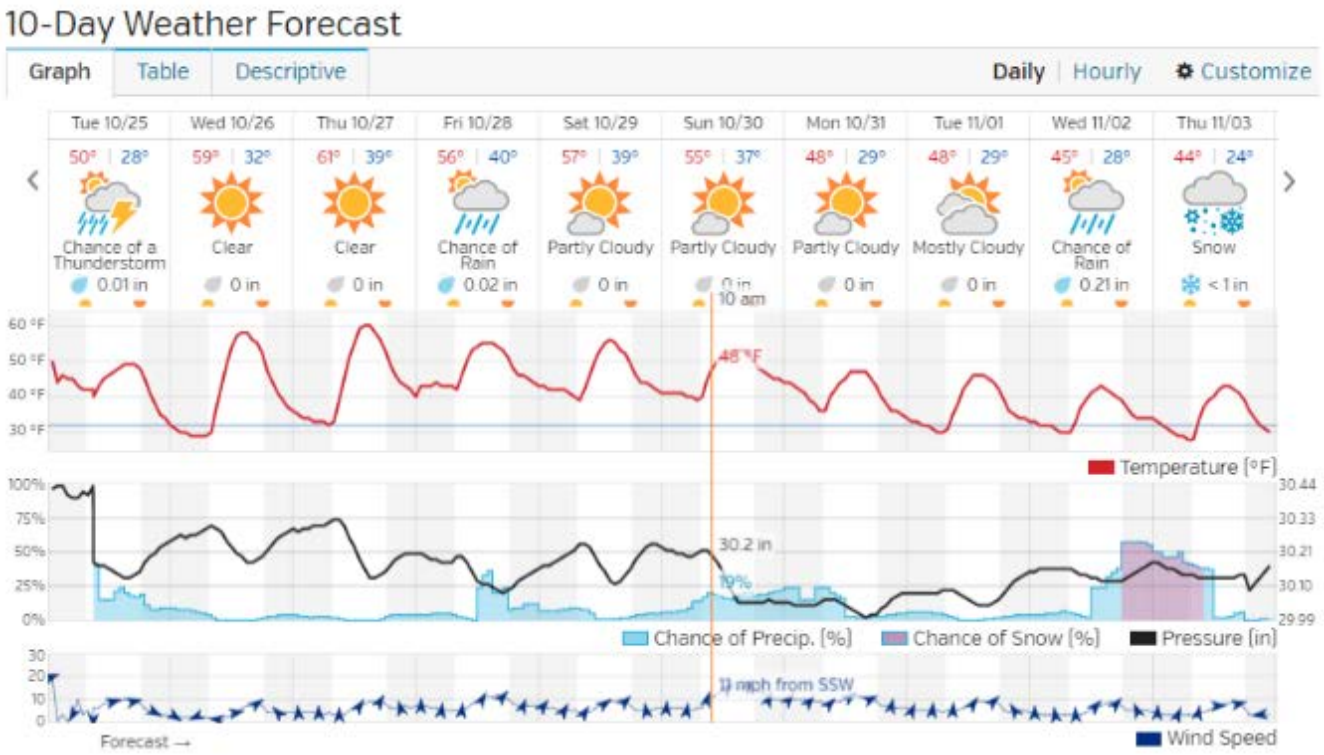
IV. Site Status

Personnel and equipment onsite

- Alexco currently employs one full-time employee (FTE), and a part-time employee who both live in Silverton and oversee operations at the Gold King IWTP. The site is also supported by remote operators from Monte Vista and Denver, and local sub-contractors as needed.

Weather conditions

- Weather Underground Report for Silverton, CO (10/25 – 11/03/2016)



Pictures from Site

Photo 1: View of IWTP on 10/20 from County Rd 110.

Photo 2: These buried 8” HDPE pipelines from Pond 2 convey water to the IWTP. Surging at the plant occurs when a single pipeline is connected, but can be controlled by the throttling valve installed at the base of the Reactor Tank. Surging was eliminated when the second pipeline was connected and put back in operation. The newly poured concrete basin below the 8” flanges captures sludge/water during the jetting process.

Photo 3: View of the A and B Cells from County Rd 110. The 52.5’ x 130’ B Bag was installed and commenced operation on 10/19.